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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,884	10/20/2000	Kenneth R. Owens	4910.00003	6113

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EXAMINER	
MATTIS, JASON E	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/692,884	Applicant(s) OWENS ET AL.	
	Examiner Jason E. Mattis	Art Unit 2616	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-24*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: the arguments supplied are not persuasive.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the After-Final Amendment filed 10/23/06. Claims 1-24 are currently pending in the application.

Response to Arguments

2. Applicant's arguments filed 10/23/06 have been fully considered but they are not persuasive.

In response to Applicant's argument that:

> "The protocol and acknowledgement signaling messages, whether in the form of sequenced protocol message units or separately sequenced poll and stat messages, of the McAllister, et al. patent are not used to establish working or protection paths or a reverse notification path in its network, but merely to determine whether a first node receives a signaling message from a second node to which it can return an acknowledgement signaling message indicating that it is still operational... The McAllister, et al., patent has no capability at any of its nodes to determine whether data on its data path was received..." (See pages 10-11 of Applicant's Remarks section)

the Examiner respectfully disagrees. Although, McAllister et al. does disclose using poll and stat messages to detect a link failure, this is not the only method of link failure

detection described. McAllister also discloses that the messages and acknowledgments can take the form of layer 3 P-NNI signaling messages corresponding to a particular virtual connection associated with a data link. In this way, the layer 3 P-NNI messages and acknowledgements are a part of the traffic flow from the connection that has been set up on the working path. Therefore, as shown in the rejections above, McAllister et al. does disclose sending a third message in response to a traffic flow being received.

In response to Applicant's argument that:

> "Moreover, the McAllister, et al. patent does not use the interruption of the third message to control protection switching by the first switch." (See page 11 of Applicant's Remarks section)

the Examiner respectfully disagrees. As pointed out by in the Applicant's Remarks, when a failure is detected in the system and method of McAllister et al., the functioning part of the network transmits a signal indicative of the failure and this signal triggers an attempt to re-route the connection along a different path. However, the initial failure is detected by the interruption of the layer 3 P-NNI messages. Therefore, the signal indicative of the failure is sent in response to the interruption of the third message meaning that the protection switching is controlled in response to the interruption of the third message as well.

In response to Applicant's argument that:

> "Moreover, the Cao, et al. application would not be able to use the acknowledgement messages generated by the McAllister, et al. patent as

> the Cao, et al. application would still perform protection switching at a downstream router by selecting one of the two paths carrying the same data." (See page 12 of Applicant's Remarks section)

the Examiner respectfully disagrees. The teaching of performing protection switching, as relied upon in the rejections above, comes from the McAllister et al. patent. As has been discussed in previous Office Actions, although the routers disclosed by Cao et al. do use the sink routers to determine when to perform a switchover and to determine the secondary path to use, there is no indication in the Cao et al. reference that using a sink router to perform these functions is preferable to using a source router. Further, Cao et al. discloses that the failure information is propagated to both the source and the sink routers of the failed path. Therefore, performing a switchover using an upstream router, as disclosed by McAllister et al., does not eliminate any benefits or advantages gained by the teachings of Cao et al.

In response to Applicant's argument that:

> "However, the Hwang, et al. patent fails to determine whether the data has been received on time as provided in the claimed invention. The Cao, et al. application and the McAllister, et al. patent are also silent with respect to determining whether data has been received on time as well as intact." (See pages 12-13 of Applicant's Remarks section)

the Examiner respectfully disagrees. In the rejections above, it is the McAllister et al. patent that is used as a teaching of the claimed limitation of determining whether data has been received on time. McAllister et al. discloses sending a third message over the

reverse notification path in response to the second switch receiving the traffic flow over the working path from the first switch in order to control protection switching by the first switch, with the third message indicating whether the traffic flow sent on the working path was received on time by the second switch (See column 9 line 47 to column 10 line 8 of McAllister et al. for reference to the messaging being in an acknowledgement format, meaning that a third acknowledgement, message is sent from the second node in response to receiving a message, which is in a traffic flow from the first node over a working virtual connection, and for reference to the acknowledgement messages implementing a keep-alive or heartbeat polling process, meaning that the acknowledgement messages are an indication of whether the traffic is received on time since these messages are sent "constantly" and are therefore expected to be acknowledged "constantly"). Since the keep-alive polling processes requires messages to constantly be acknowledged, receipt of the acknowledgement message as disclosed by McAllister et al. does provide an indication that data has been received on time as claimed.

In response to Applicant's argument that:

> "However, the McAllister, et al. patent clearly shows that the [P-NNI] signaling messages are sent on a signaling link separate from the data traffic carried in ODR SPVC links. Moreover, the P-NNI signaling messages provided by the McAllister, et al. patent are not sent in response to receiving the traffic flow on the working path as required in the claimed invention as the P_NNI signaling messages of the McAllister, et

> al. patent are generated an sent independently of the data traffic carried in the ODR SPVC links. As a result, the McAllister, et al. patent has no capability to determine whether its data traffic was received on time as provided by the claimed invention." (See page 14-15 of Applicant's Remarks section)

the Examiner respectfully disagrees. McAllister et al. discloses that the P-NNI signaling messages may be sequenced data PDUs, i.e. PDUs that carry signaling messages for virtual connections associated with a data link (See column 9 lines 56-60 of McAllister et al.). Since the P-NNI signaling messages are data PDUs they are not sent on a separate signaling link and are part of a traffic flow over the working path as required by the claims. Further, since the P-NNI signaling messages are a part of the data traffic flow, the reception, or lack of reception, of a response to these P-NNI signaling messages does indicate whether data traffic was received on time, as claimed.

In response to the Applicant's argument that:

> "Further, the Examiner has yet to show that one of ordinary skill in the art would consider combining the Cao, et al. patent having egress routing control with the McAllister, et al. patent having independent signaling link with source routing control." (See page 15 of Applicant's remarks section)

the Examiner respectfully disagrees. As shown above, the signaling messages of McAllister et al. are not independent of the traffic flow. Further, as discussed in the rejections of the previous Office Action, one of ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of McAllister et al. with

the teachings of Cao et al. to allow a first, source, node to learn about a failure in a data path and immediately stop sending data packets that will be "lost" on the failed path before the source node switches to the secondary path and also allow the source node to resend packets on the secondary path that may have been "lost" while the destination node was receiving packets through the failed path.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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